



Technical Service Bulletin

No.B419-04v3
27 February 2006

Reissue

Please replace the previous edition of this bulletin.

This bulletin supersedes TSB B419-04v2/2005 dated 13 January, which should either be destroyed or clearly marked to show it is no longer valid (e.g. with a line across the page).

Subject/Concern: Battery Discharged After Vehicle Has Been Standing For a Few Days

Models:

XJ Range | VIN-range: G00442-REM = G47989 - FEM = G42682

Markets: All

Section: 419-00

Summary:

This Technical Bulletin has been issued to address customer concerns of the vehicle battery becoming discharged when the vehicle has been standing for a few days.

Version 3 of this Technical Bulletin has been issued due to the addition of final VINs for the REM and FEM.

Cause: It has been found that, on some vehicles, either the Rear Electronic Module (REM) or the Front Electronic Module (FEM) is 'waking up' and powering the complete vehicle electrical system. This will result in the quiescent drain increasing for a period of approximately 40 minutes after which sleep mode will be re-entered.

Action: Should a customer express concern it will be necessary to first check and record the 'Module Reset Count' readings from the FEM and REM using WDS datalogger. Then after a period of time re-check and record 'Module Reset Count' readings for FEM and REM using WDS datalogger. When comparing the first and second set of readings, it can be determined if a fault is present. Follow the Service Instruction outlined below.

Parts Required:

Description	Part Number	Quantity
Front Electronic Module (FEM)	C2C 22369	1
Rear Electronic Module (REM)	C2C 22368	1

Labour Time:

Operation Description	Operation No.	Time
Read recorded resets of FEM & REM modules using WDS data logger	86 93 53	0.3 hours
Front Electronic Module renew	86 80 41	0.6 hours

Rear Electronic Module renew	86 80 37	0.6 hours
Re-configure Driver Door Module (DDM) using WDS	86 99 34/01	0.3 hours
Re-configure FEM using WDS	86 99 24/01	0.2 hours

Repair/Claim Coding:	
Causal Part:	C2C 22369 C2C22368
ACES Condition Code:	N/A
Defect Code:	N/A

Service Instruction

Additional Information

The minimum period, for a reset, will be one hour due to the fact that, when woken up, the vehicle will take 40 minutes to return to sleep mode when the reset will be recorded. It will probably be necessary to leave the vehicle overnight or in some cases return the vehicle to the customer and make arrangements to recheck the vehicle in a few days. It is imperative however that the battery is never allowed to drain so low that low battery voltage cranking increases the count. Normal vehicle usage should not incur incremental counts. If a module has self reset and 'woken' the car, then the number of counts on that module will be higher than the previously recorded number. If either the FEM or REM shows an increase in the number of resets it means that it has woken up and the quiescent drain increased for a period of time. Replace the module that shows an increase in the number of resets. Other causes of increases on the reset counter are, battery connection, very low battery voltage as the modules reset during cranking, and use of WDS diagnostics.

NOTE: The battery must be fully charged before commencing.

- 1 . Open the door.
- 2 . Ensure the ignition is switched 'OFF', handbrake is 'ON' and transmission selector lever is in park.

NOTE: Ensure Worldwide Diagnostic System (WDS) is loaded with software release JTP 759/35 or later.

- 3 . Connect PTU to the vehicle diagnostic connector.
- 4 . Enter VIN and navigate to 'Content Model' screen.
- 5 . Select 501-00 body system and select datalogger.

NOTE: On WDS the FEM is referred to as the GEM.

- 6 . Select the module reset counters for the GEM and the REM.
- 7 . Start the datalogger, switch the ignition 'ON' when prompted.
- 8 . Recorded the reset readings.
- 9 . Stop the datalogger and switch the ignition 'OFF'.
- 10 . Switch off, disconnect and return WDS to Docking station.

NOTE: It will be necessary to leave the vehicle overnight or in some cases return the vehicle to the customer and make arrangements to recheck the vehicle in a few days.

11 . Close the door.

12 . Repeat steps 1 to 9.

NOTE: If the FEM or the REM are not at fault, any other repairs must be carried out as a separate Warranty Claim.

13 . If from the results of the two checks it can be determined there is a fault with the FEM or REM. Install a new FEM or REM (see Global Technical Reference GTR Workshop Manual, section 419-10)

On vehicles up to VIN G12778, if you need to replace the REM, check the software level. If AE level or below, you must carry out a configuration of the FEM and DDM. If you need to replace FEM, check the software level of the REM. If AE level or below, you will need to replace the REM as well as the FEM and re-configure the DDM. To re-configure the FEM and DDM:

14 . Navigate to configuration main menu.

NOTE: On WDS the FEM is referred to as the GEM.

15 . Select and run 're-configure existing GEM' application, and/or select and run 're-configure existing DDM' application.

16 . After the re-configuration of the FEM and/or DDM is complete, switch 'OFF' PTU, disconnect from vehicle and return WDS to original location.